

## **Maryland HRSA State Planning Grant**

# **The Costs of Not Having Health Insurance in the State of Maryland**

Final Report

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Johns Hopkins Bloomberg School of Public Health:

Hugh Waters, MS, PhD

Laura Steinhardt, MPH

Thomas Oliver, PhD

Jason Gerson

Maryland Department of Health and Mental Hygiene:

Alice Burton, MHS

Susan Milner, MPH

Stacey Davis, MPH

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## Executive Summary

Under a grant from the Health Resources and Services Administration (HRSA), the Maryland Department of Health and Mental Hygiene and the Johns Hopkins Bloomberg School of Public Health have completed a detailed study of expenditures and costs caused by a lack of health insurance coverage in the State. Key results are summarized in the text and tables below.

- **Overall, annual economic losses related to non-insurance in Maryland totaled \$2.4 to \$3.7 billion dollars in FY 2002.** Between \$1.1 and \$2.3 billion of this amount is due to losses to individuals in terms of decreased health status and increased financial uncertainty. \$318 million is spent directly by uninsured individuals as out-of-pocket health care expenditures.
- **The health system – including public and private healthcare payers, philanthropic contributions, and donations from private physicians – spends between \$0.9 million and \$1.1 billion on the uninsured.** Uncompensated hospital care accounts for between \$254 and \$370 million of this amount; this range reflects different estimates of the percentage of charity care and bad debt reported by hospitals that goes to uninsured patients rather than insured ones. An additional \$462 million is spent directly on the uninsured through public health programs.
- **The State Government is the largest contributor to direct expenditures on the uninsured – spending a total of \$334 million (low estimate) to \$343 million (upper estimate).** Through public health programs, the State paid for \$311 million in services for uninsured individuals in FY 2002. Additionally, the State contributed between \$20 and \$29 million to spending on uninsured hospital patients through the hospital rates it pays that include uncompensated care mark-ups, and also paid funds to FQHCs and school-based health programs. The federal government paid between \$139 and \$203 million for the uninsured through the hospital rate system, and also contributed \$138

million through public health programs and Federally Qualified Health Centers. Local governments directly contributed \$10 million on spending for the uninsured.

- **Private insurance companies paid between \$95 and \$139 for the uninsured** – through hospital payment rates that include the cost of uncompensated hospital care under Maryland’s all-payer hospital payment system. This amount is reflected in higher insurance premiums for privately insured individuals. In addition, private physicians contributed an estimated \$211 million in charity care – uncompensated care provided to uninsured individuals. Private philanthropic spending accounted for an additional \$12 to \$25 million.
- **On a per-capita basis, the State and local governments spent between \$497 and \$510 per uninsured person in FY 2002.**<sup>1</sup> The Federal Government State spent an additional \$401 to \$493 per person. Private payers – including insurance, physicians, and philanthropy – accounted for between \$460 and \$542 per person. Individuals paid on average \$459 in direct out-of-pocket expenditures for health services.

The sources and flows of spending on the uninsured are complex, and these expenditure levels should not be interpreted as savings that would directly result from an expansion of insurance coverage. These results are consistent with earlier studies completed at the national level, and also add considerable detail not available in these studies. A study recently commissioned by the Institute of Medicine found overall annual society-level economic costs of \$4,084 per uninsured person in the United States in 2001. \$641 of this amount was incurred directly by individuals as out-of-pocket costs, compared to our estimate for Maryland of \$459. The IOM estimate for total costs within the health system – including public and private payers as well as contributions by physicians and philanthropy but excluding individual costs – is \$1,759 per person. Our study in Maryland provides a corresponding estimate of \$1,358 to \$1,545 per person.

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<sup>1</sup> Calculated as spending per uninsured person using the 2002 and 2003 Current Population Surveys (see Section III).

**Table S1. The Costs of Non-Insurance, by Component**

Component	Value FY 2002 (\$ millions)		% of Total (Low Estimate)
	Low Estimate	High Estimate	
1. Hospital Care	\$253.9	\$370.3	10.5%
2. Other Public Subsidies :			
Statewide programs	\$408.6	\$408.6	16.9%
County-level	\$42.9	\$42.9	1.8%
FQHCs	\$10.0	\$10.0	0.4%
School-based health	\$0.5	\$0.5	0.0%
3. Physician Services	\$210.7	\$210.7	8.7%
4. Philanthropic Spending	\$12.1	\$25.4	0.5%
5. Individuals' Out of Pocket	\$317.7	\$317.7	13.1%
6. Health Status Losses	\$1,137.5	\$2,268.1	47.0%
7. Losses from Risk	\$28.0	\$56.0	1.2%
<b>Total</b>	<b>\$2,422</b>	<b>\$3,710</b>	<b>100%</b>

**Table S2. The Costs of Non-Insurance, by Source**

Payer	Value FY 2002 (\$ millions)		% of Total (Low Estimate)
	Low Estimate	High Estimate	
Federal Government	\$277	\$341	11.4%
State Government	\$334	\$343	13.8%
Local Governments	\$10	\$10	0.4%
Private Payers	\$318	\$375	13.1%
Individual Out of Pocket and Health Losses	\$1,483	\$2,642	61.2%
<b>Total</b>	<b>\$2,422</b>	<b>\$3,710</b>	<b>100%</b>

## I. Introduction

In the United States, individuals that lack health insurance coverage do not receive all of the healthcare services that they need, and their health status suffers as a result. The uninsured are more likely than those with insurance to postpone seeking care when they first become sick. As a result, they are more likely to develop serious conditions that are costly to treat and are a threat to their long-term well-being. These consequences are not trivial. The Institute of Medicine estimated that nearly 18,000 people die each year in the United States because they lack health insurance. The IOM also concluded that people who lack health coverage get poorer care when they do enter the medical system.<sup>2</sup> Despite lacking coverage, the uninsured receive healthcare services from multiple sources. These services are provided and paid for by a complex combination of government programs, private health providers, philanthropic sources, and uninsured families and individuals themselves.

This study describes the sources of spending on the uninsured, and quantifies the amounts spent. The study includes uncompensated hospital care, public health programs that serve the uninsured, private physicians, philanthropy, and direct out-of-pocket spending. Additionally, the study documents the estimated economic value of health status losses resulting from a lack of insurance coverage. The results are presented both by category – type of expenditure – and by source.

The presentation by source is not intended to imply that each payer should expect to receive proportionate savings should an insurance expansion be achieved. Meyer and Wicks (2003) present a variety of options for financing insurance coverage, and point to the importance of taking into account existing spending on the uninsured within the system. Some funds might be direct savings to payers; others may be used to help finance an insurance expansion. The resulting reduction in the cost of health status losses would benefit individuals, and ultimately, society as a whole.

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<sup>2</sup> The Institute of Medicine (2002) has documented these health status losses in its report *Care Without Coverage: Too Little, Too Late* (IMO 2002).

## **II. Previous Studies**

Quantifying expenditures on the uninsured is a relatively new area of research, and few previous studies on this topic exist. However, growing numbers of uninsured Americans and a resurgence of interest in ways to expand coverage to uninsured Americans have brought forth a series of publications on this topic within the past two years, including an Institute of Medicine series on the consequence of non-insurance, with one book in the series devoted to quantifying the costs of non-insurance. This section of the report will summarize the previous research related to the costs of the uninsured and how it relates to the Maryland study on this topic. There are three studies that are highly relevant to our research, each of which will be summarized briefly below: (1) a study carried out by the Texas State Comptroller's Office on spending on the uninsured in that state (Texas Comptroller's Office 1999); (2) a Kaiser Family Foundation study on national expenditures on the uninsured (Hadley and Holahan, 2003b); and (3) an Institute of Medicine report on the medical care and larger societal costs of non-insurance in America (IOM 2003a). Table 1, below, summarizes these studies and provides per-capita spending and cost estimates for the components most relevant for our study in Maryland.

### **1. Texas State Study of Expenditures on the Uninsured**

To date, there is only one previous study at the state level that quantifies the costs of the uninsured. The Texas State Comptroller's office conducted a study on the expenditures on medical care for the uninsured in Texas for fiscal year (FY) 1998, as part of a larger study on overall health care expenditures in the state. Using provider-based surveys and program budget data, the study estimated that Texas spent \$4.7 billion on care for the uninsured in FY 1998, or \$963 per uninsured individual. Expenditures included \$2.1 billion (46 percent) in hospital spending; \$914 million (19 percent) in physician charity care; and \$108 million (2 percent) and from local health agencies, among other sources. The Texas study quantifies only the direct medical costs to third parties of care for the uninsured (or approximations thereof) and does not include in its totals: uninsured individuals' out-of-pocket payments for medical care; costs

resulting from inefficient health services use; productivity losses; disability insurance; lost health status; added risk; and costs to the criminal justice system.

## **2. Kaiser Study on National Expenditures on the Uninsured**

A recent Kaiser Family Foundation study examined national estimates of expenditures by and for the uninsured (Hadley and Holahan 2003a). Researchers used two approaches to quantify expenditures by and for uninsured individuals. The first approach used Medical Expenditure Panel Survey (MEPS) data – surveys of the uninsured themselves – aggregated from 1996, 1997, and 1998, and adjusted for differences with National Health Accounts data, to produce national expenditure estimates for calendar year 2001. Using this approach, the authors estimate that a total of \$1,253 was spent per full-year uninsured American, of which \$501 (40 percent) was spent out-of-pocket and \$752 (60 percent) was spent on behalf of the uninsured, in the form of public and philanthropic programs, uncompensated care, and workers' compensation programs. Including both full- and part-year uninsured individuals in the analysis yields spending of \$1,587 per capita, 34.8 percent from uncompensated care, 26.7 percent out-of-pocket, 24.5 percent from private insurance, and 14.0 percent from public insurance. The authors also estimate that a total of \$34.5 billion in uncompensated care was provided to the part- and full-year uninsured in 2001. Of this total, \$6.5 billion (18.8 percent) was from public sources; \$12.3 billion (35.7 percent) was from private sources; and \$15.8 billion (44.6 percent) was from unidentified sources.

The second approach the authors use is to calculate institutional spending on the uninsured, using provider survey and program budget data. This tally of institutional expenditures is most similar to the methodology employed by the Maryland costs of non-insurance study. Using this methodology, Hadley and Holahan (2003a) compute an estimate of \$35.8 billion in uncompensated care was provided to the uninsured in 2001.<sup>3</sup> By provider type, \$23.6 billion (65.9 percent) of this uncompensated care was provided by hospitals; \$7.11 billion (19.9 percent)

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<sup>3</sup> This method only includes uncompensated care and not out-of-pocket spending by the uninsured; the uncompensated hospital care in the \$35.8 billion total does not include estimates of the portion of hospital surpluses and the amount of philanthropic contributions that support uncompensated hospital care, which they estimate separately to be an additional \$2.3 billion to \$4.6 billion.

by clinics and community health care providers; and \$5.10 billion (14.2 percent) by physicians. Analyzing the amount of uncompensated care by payer source, \$30.6 billion (85.5 percent) was from government spending (65 percent federal; 35 percent state/local) and \$5.2 billion (14.5 percent) was from private sources (97.5 percent from physician charity care). As the first method estimates a total of \$34.5 billion in uncompensated care for all uninsured, and the second approach yields a total of \$35.8, the authors conclude that an approximate “ballpark” figure of uncompensated care provided to uninsured Americans in 2001 is \$35 billion.

In their study on the costs of care for the uninsured, Hadley and Holahan did not include certain public subsidies, such as specific program spending at the state and particularly the county level;<sup>4</sup> costs resulting from inefficient use of health service use; productivity losses; lost health status; disability insurance payments; and costs to the criminal justice system.

### **3. Institute of Medicine Study: *Hidden Costs, Value Lost – Uninsurance in America***

In June 2003, the Institute of Medicine (IOM) released the fifth book in its series on the consequences of non-insurance, focusing on the individual and societal costs of non-insurance in America (2003a). Standardizing its analyses to 2001 (calendar year), the report explores: the current expenditures by and for the uninsured; other costs such as the losses in health status and increased risk of being uninsured; and lastly the amount of additional health service the uninsured would use if they gained insurance.

The IOM report draws on the findings by Hadley and Holahan (2003a) using their first approach (pooled MEPS data) to quantify current expenditures on medical services for the uninsured. According to these figures, there was a total of \$98.9 billion in expenditures on the part- and full-year uninsured in 2001. These expenditures are composed of the following:

- Out-of-pocket expenditures by the uninsured (26.7 percent of total);

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<sup>4</sup> State/local expenditures include only programs at the national level for which there is matching state and local funding and expenditures on programs presumed to serve the uninsured multiplied by the overall percentage of users who are uninsured.

- Private insurance payments and workers' compensation (24.5 percent);
- Public insurance payments and workers' compensation (14.0 percent);
- Uncompensated care (34.9 percent).

Next, the IOM report quantifies other “hidden costs” of being uninsured. Health status losses are calculated using a version of the “health capital” approach typically employed by government agencies that regulate public health and safety, such as the Food and Drug Administration and the Environmental Protection Agency, which compares policies to mitigate risk and improve health by estimating the value of averted risk expressed by expected number of lives saved. The IOM study uses estimates developed by economist Vigdor (2003), who combines information on the longevity, prevalence of health conditions, and health-related quality of life for insured and uninsured populations, to determine the value of diminished health and longevity within the U.S. population due to non-insurance.

Vigdor (2003) uses \$160,000 to represent the value of a year of life in perfect health and a discount rate of 3 percent to estimate that the economic value of a healthier life that an uninsured individual forgoes due to lack of insurance ranges from \$1,645 to \$3,280 per year. In the aggregate, this represents an annual cost of \$65 billion to \$135 billion due to diminished health and shorter life spans experienced by uninsured Americans (IOM, 2003a). The IOM also attempts to quantify the cost of increased financial risk to families caused by non-insurance – estimating that this increased risk poses an aggregate economic cost of \$1.6 to \$3.2 billion for uninsured Americans.

Finally, the IOM report summarizes the costs of additional care the uninsured would use if they gained health insurance. These estimates are drawn from three primary studies, conducted by Hadley and Holahan (2003b), Long and Marquis (1994) and Miller et al (2003). Assuming no other structural changes in the systems of health services delivery or finance, scope of benefits, or provider payment, the IOM estimates that the cost of additional health services use if the uninsured gained coverage would range from \$34 billion to \$69 billion (in 2001 dollars).

The IOM report is the most comprehensive of the three studies, as it includes not only direct costs of medical care to the uninsured and third parties, but the “hidden costs” of health status losses and financial risks as well. However, the IOM study does not include: disability insurance; costs to the criminal justice system, which it notes almost certainly has higher current budgetary costs due to non-insurance; and productivity losses, finding no detectable financial losses to individual employees resulting from lack of insurance.

#### **4. Comparing Per-Capita Costs and Expenditures**

Table 1 summarizes the main findings from the three studies described above – in terms of annual costs and expenditure per full-year uninsured person. We have converted the IOM study results into per-capita estimates using the counts of the uninsured from the March 2002 CPS – corresponding to calendar year (CY) 2001 for the time period for non-insurance.

**Table 1. Previous Studies of the Costs of Non-Insurance**

Study, Time Period, and Categories	Cost per Full-Year Uninsured Person	Omitted Categories
<b>State of Texas (FY 1998)</b>	<b>\$963</b>	Health status losses / Public and private insurance / Disability insurance / Penal system / Out-of-pocket spending
Hospital Spending	\$437	
Physician Charity Care	\$252	
State Health Programs and Schools	\$166	
Other Donations and Costs	\$108	
<b>Kaiser Study - National (CY 2001)</b>	<b>\$1,253</b>	State and local / Health status losses / Disability insurance / Penal system
Individual Out of Pocket Costs	\$501	
Institutional Costs	\$752	
<b>IOM Study - National (CY 2001)</b>	<b>\$4,084<sup>1</sup></b>	Disability insurance / Penal system
Individual Out of Pocket Costs	\$641	
Private Insurance and Workers' Comp.	\$587	
Public Insurance and Workers' Comp.	\$335	
Hospitals, Physicians, and Philanthropy	\$837	
Reduced Health Status (lower estimate)	\$1,645	
Added Risk (lower estimate)	\$39	

<sup>1</sup> Calculated using 2002 CPS.

The results show clearly that estimates of spending by and for the uninsured are sensitive to the categories that are included. The Kaiser and IOM studies estimate out-of-pocket spending by the uninsured at, respectively, \$501 and \$641 per-capita. The Texas study does not include out-of-pocket spending, and estimates total institutional spending – including hospitals, physicians, state programs and philanthropy – at \$963 per-capita, compared to \$752 in the Kaiser study and \$1,759 for the IOM study (combining insurance, workers’ compensation, hospitals, physicians, and philanthropy). In fact, these estimates are relatively consistent, considering that the Texas study does not include out-of-pocket spending or expenditures by public and private insurance and disability insurance, and that the Kaiser study does not include state and local government expenditures. There are some costs – such as expenditures by the penal system – that are not captured in any of the studies. The IOM estimate is the most comprehensive of the three, and is the only study to estimate the economic value of individual losses to do decreased health status and increased risk.

### **III. The Costs of Non-Insurance in Maryland, by Component**

Our study of costs and expenditures related to a lack of health insurance coverage in the State of Maryland includes the following components:

1. Uncompensated Hospital Care.
2. Other Public Subsidies for the Uninsured.
3. Physician Ambulatory Services.
4. Philanthropic Spending.
5. Uninsured Individuals' Costs.
6. Lost Health Status and Added Risk.

For each of these components and for the summary results, we use a time period corresponding to Fiscal Year 2002 (July 2001 to June 2002). For some components of the study, we are able to obtain estimates only from earlier time periods. This is the case for the value of physician ambulatory care provided to the uninsured – which is derived from surveys conducted in 1999 and 2001 – and also for uninsured individuals' direct out-of-pocket spending, which is estimated using the 2000 Medical Expenditure Panel Survey (MEPS). For these components of the study, we update the estimates to FY 2002 inflation rates for medical care services provided by from the Bureau of Labor Statistics (BLS 2003).<sup>5</sup> A detailed description of each component of the study follows below.

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<sup>5</sup> Specifically, the medical services inflation rates used are as follows: 1998-1999 = 2.91%; 1999-2000 = 3.50%; 2000-2001 = 4.96%; 2001-2002 = 4.84%; 2002-2003 = 5.10%.

# **1. Uncompensated Hospital Care**

## **A. Introduction**

Hospital care for the uninsured – both inpatient and ambulatory – comprises a large percentage of overall spending on the uninsured. The study conducted by the Texas Comptroller’s Office (1999) concluded that \$2.1 billion, or 46 percent of the \$4.7 billion spent on care for the uninsured in fiscal year 1998 was spent by hospitals for uninsured and unreimbursed Medicaid services. In estimating national spending on the uninsured in 2001 using data obtained from the American Hospital Association and providers, Hadley and Holahan calculate that hospitals spent \$23.6 billion in uncompensated care, equal to 65.9 percent of the overall \$35.8 billion estimated spending on the uninsured (2003a).

Maryland hospitals are unique in that uncompensated hospital care is built into each hospital’s rate structure in an effort to encourage provision of care for the uninsured and help distribute the burden of caring for the uninsured more evenly among hospitals. Maryland is the only state in the U.S. whose hospital rates are regulated by a state agency through an all-payer rate system. Beginning in 1971, in order to control rapidly rising hospital charges, the state enacted hospital rate regulation and created the Health Services Cost Review Commission (HSCRC) to oversee the hospital rate regulation.

All payers, including Medicare, Medicaid, and private insurers, must pay the same rate to a hospital, although discounts are given to encourage certain behaviors – for example, a two percent discount for prompt payments. The rates each hospital receives depend on various factors, including indices of hospital factor cost growth, case mix index (CMI), capital needs, uncompensated care, and other indicators. Each year, every hospital in Maryland reports its “uncompensated” care amount to the HSCRC, which then uses uncompensated care as a percent of gross patient revenues as a factor in determining the hospital’s rates.<sup>6</sup> Reimbursement is built into payers’ rates allowing for up to 8.4 percent of gross patient revenues in uncompensated care

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<sup>6</sup> There is not an exact correlation between a hospital’s amount of uncompensated care and its rates. In order to determine the amount of uncompensated care that is factored into each hospital’s rates, the HSCRC runs a regression for each hospital. The important point relevant for this analysis is that the amount of uncompensated care is proportional to a hospital’s rates.

in FY 2002. Hospitals with more than 8.4 percent of gross patient revenues in uncompensated care receive revenues from an uncompensated care pool, to which each hospital contributes three-quarters of one percent of revenues annually. For a more detailed explanation of Maryland's all-payer rate system, please refer to Appendix 4 – Maryland's All-Payer Rate System.

## **B, Methods**

The uncompensated care amount each hospital reports annually to HSCRC – and that is factored into the hospital's rate structure – includes inpatient care, ambulatory care, and emergency room (ER) care.<sup>7</sup> We obtained figures on aggregated uncompensated care for Fiscal Year 2002 from the HSCRC. Uncompensated care consists of bad debt and charity care, each of which is defined by individual hospitals. Bad debt includes unpaid claims, largely incurred by uninsured patients, but which also can include co-insurance charges that patients with insurance are unable to pay.<sup>8</sup> Although policies vary by hospital, unpaid claims typically revert to bad debt after 120 days. Charity care policies are unique to each hospital and are typically determined by income level and insurance status. While low-income patients without insurance may be most likely to receive charity care, policies also may cover the co-payments of low-income insured patients. A challenge, therefore, is estimating what portions of bad debt and charity care are for uninsured patients. Previous studies have not attempted to calculate this and have used aggregate uncompensated care as an estimate of spending on the uninsured (Hadley and Holahan 2003a; Cunningham and Tu 1997).

In order to refine the aggregated amount of uncompensated care at Maryland hospitals to more accurately reflect actual care delivered to the uninsured, we initially interviewed hospital finance administrators for their estimate. We also obtained data from five Maryland hospitals' administrative and billing databases on bad debt and charity care by payer status.

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<sup>7</sup> Hospitals also report uncompensated care that is provided off-site and is therefore not regulated. "Unregulated" uncompensated care, which totaled \$32 million in FY2002, includes freestanding-clinics, home health care, outpatient renal dialysis, skilled nursing care, non-patient laboratory services, Physicians Part B, Certified Nurse Anesthetist, and Other care. We choose not to count this \$32 million, since there is likely significant overlap with the Physician Ambulatory Care costs we include in Section II-3.

<sup>8</sup> Denied claims are not included in bad debt.

Finally, we calculated the “burden” of uncompensated hospital care in Maryland to determine who pays for uncompensated hospital care in Maryland. Using the all-payer rate system, we applied the distribution of payer expenditures across Maryland hospitals to the uncompensated care total to estimate the how much of the uncompensated care burden each payer bears.<sup>9</sup>

### **C. Results**

In FY 2002, uncompensated care charges totaled \$529 million at 50 acute care Maryland hospitals, up slightly from \$522 million in FY 2001. Uncompensated care averaged 7.0 percent of gross patient revenues, ranging from 1.76 percent to 26.01 percent. Bad debt accounted for \$395 million of the uncompensated care; the remaining \$134 million was considered charity care. In our study, both bad debt and charity care contribute to the costs of uninsurance, though in differing proportions.

In our interviews with hospital staff, financial administrators estimated that between 80 percent and 90 percent of bad debt and charity care charges were for uninsured (termed “self-pay”) patients at their hospitals. However, data gathered directly from five Maryland hospitals for FY 2002 revealed that a range from 36 percent to 89 percent of charity care charges were for uninsured (“self-pay”) patients (average = 62.1 percent). Data from these five hospitals also showed that that between 36 percent and 64 percent of hospital bad debt is incurred by uninsured (“self-pay”) patients (average = 43.2 percent).

We calculated both a low estimate and a high estimate of uncompensated care for the uninsured.<sup>10</sup> We conclude that a conservative estimate of charity care for the uninsured is 62.1 percent \* \$134 million in total charity care in FY 2002 = \$83.2 million. Similarly, a conservative estimate of bad debt charges incurred by the uninsured = 43.2 percent \* \$395 million in total bad debt in FY 2002 = \$170.6 million. Following these estimates, the low

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<sup>9</sup> There are some small discounts applied to certain payers; for example Medicare and Medicaid receive a 4% discount; however, for the purposes of this study, we assume that all payers pay the same rate.

<sup>10</sup> Due to the relatively low average portions of bad debt and charity care for the uninsured calculated from our small sample size, compared with the higher estimates from hospital administrators (and the precedent in the literature of using all uncompensated care as a proxy for spending on the uninsured), the authors feel that the average of bad debt and charity care for the uninsured from our sample size is a conservative, or low, estimate.

estimate for uncompensated care is \$83.2 million + \$170.6 million = \$253.9 million in uncompensated care at Maryland hospitals in FY 2002. Similarly, we estimate the high end of this figure to be \$370.3 million – based on estimates that 87.7 percent of charity care and 64.0 percent of bad debt are spent on the uninsured.

Table 2 shows the payer distribution for uncompensated care for the uninsured by source (federal, state, private, and other). Assuming that Medicare payments are 100 percent federal, and Medicaid payments are 50 percent state and 50 percent federal, we conclude that of the \$253.9 million in hospital care for the uninsured at Maryland hospitals in FY 2002 (low estimate), \$132.4 million is paid by the federal government, \$18.8 million by the state government, \$90.5 million by private payers, and \$12.3 million by other sources.

**Table 2. Uncompensated Hospital Care, by Payer**

Payer	Value FY 2002 (\$ millions)		% of Total
	Low Estimate	High Estimate	
Medicare	\$113.6	\$165.6	44.7%
Medicaid	\$37.5	\$54.8	14.8%
Private Insurance	\$90.5	\$132.0	35.6%
Other (Workers' Comp., Other Gov't, Donors)	\$12.3	\$17.9	4.8%
<b>Total</b>	<b>\$253.9</b>	<b>\$370.3</b>	<b>100%</b>

Source for Distribution: Maryland Health Services Cost Review Commission

We also studied the HSCRC inpatient database to see if there are discernible patterns indicating that the uninsured incur higher expenses than insured patients, in general or for specific diagnoses. Although the uninsured do have higher average charges per hospitalized day than do Medicaid patients, we were unable to find systematic patterns that the uninsured are more

expensive to treat on an inpatient basis than insured patients.<sup>11</sup> Even though the uninsured are likely to arrive at the hospital with more significant medical complications than insured patients, the difference in health status may well be balanced out by the fact that uninsured patients receive less care on average than those with insurance.

However, our analysis of the HSCRC inpatient database does show that a relatively high percentage of the hospitalizations of uninsured patients are avoidable. Using a methodology developed by Hoffman and Gaskin (2002), we calculated that 18 percent of the hospitalizations of self-pay (uninsured) patients in CY 2002 were avoidable, compared to 11 percent of privately insured patients. In 2002, there were 32,085 uninsured inpatient stays – with average charges of \$5,708. If 7 percent are avoidable (compared to private insurance), the resulting social cost is \$12.8 million. Because this amount is already reflected in overall hospital uncompensated care provided to uninsured patients (including patients who may have had an avoidable condition), we do not include it separately in our summary calculations.

Additionally, other sources have documented that the uninsured use the health care system in an inefficient manner, directly incurring additional charges as a result. A report commissioned by the Maryland Health Care Commission (Project Hope 2003) found that in CY 2001 uninsured patients had on average 0.59 emergency room visits per person annually, compared to 0.22 for private insurance and 0.61 for Medicaid. As with avoidable hospitalizations, the uncompensated care spent for the high rate of ER use by the uninsured is included in the costs of hospital uncompensated care documented above.

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<sup>11</sup> Within the comprehensive HSCRC discharge database for FY 2002, the average cost per day for uninsured patients was \$1,857 – compared to average daily charges for Medicaid of \$1,667, and \$2,232 for Medicare, \$2,333 for indemnity insurance, and \$2,146 for HMOs. In terms of total charges per hospital stay, the uninsured accrue statistically significantly lower charges than any other payer category.

## **2. Other Public Subsidies for the Uninsured**

### **A. Introduction**

Public programs funded by the federal, state, and county governments provide a significant amount of care to the uninsured. The Texas study of expenditures on the uninsured showed that 24 percent of this spending was from federal, state, and county programs serving the uninsured. In their summary of national spending on the uninsured using provider-based cost estimates, Hadley and Holahan (2003a) estimate that \$7.1 billion, or 19.9 percent of the total \$35.8 billion, is spent by community health care providers and government direct care programs.

Uninsured residents typically access publicly funded services through community health centers, state-run facilities, county health departments, local physician networks, and charitable organizations, collectively known as the safety net.<sup>12</sup> Many of these programs – including federally qualified health centers (FQHCs), alcohol and drug abuse treatment programs, and Title X Family Planning grants – serve all Maryland residents, regardless of insurance status, although a significant percent of beneficiaries are uninsured. Other programs, including the Maryland PrimaryCare program and the Maryland Breast and Cervical Cancer programs, exclusively serve the uninsured. In this section, we quantify the expenditures of both types of public programs on the uninsured. To the extent possible, we include only clinical services that would be reimbursed by insurers, and do not include support or wrap-around services such as transportation to and from health care services or health promotion activities.

### **B. Methods**

We used three primary approaches to quantify public subsidies for the uninsured: (1) a survey of state programs and agencies affiliated with the Maryland Department of Health and Mental Hygiene (DHMH); (2) a survey questionnaire completed by county health departments; and (3) collection of data from other relevant federal and state programs not affiliated with Maryland DHMH. Each of these approaches is described in more detail below.

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<sup>12</sup> Although some publicly-funded services may be provided and partially funded by private charitable organizations, we only include the public subsidies for these services here; philanthropic contributions, which may also support these services, are included in Section II-4 of this report.

## **Survey of Maryland DHMH Programs and Affiliated Agencies**

Through an extensive series of interviews with program administrators within the Maryland DHMH, we collected data on clinical program expenditures for these programs and agencies in FY 2002. We also collected information on the total numbers of beneficiaries of these programs, the proportion of beneficiaries who are uninsured, and expenditures directly on the uninsured. These programs are listed in Table 3 below. We used actual expenditures on the uninsured when these figures were available; otherwise, we estimated expenditures on the uninsured by multiplying total expenditures by the proportion of beneficiaries who are uninsured, a methodology that Hadley and Holahan (2003a) employ when estimating expenditures on the uninsured in public programs. Actual data on uninsured beneficiaries were available for most programs; in other cases we relied on estimates supplied by program administrators.

## **Questionnaire Completed by County Health Departments**

Many of the programs serving the uninsured in Maryland are coordinated at the local level by county health departments and the City of Baltimore. Accordingly, we developed a questionnaire, with significant input from the county health officers, to estimate local government health expenditures on the uninsured. The questionnaire was distributed to each local government health department. Respondents were asked to list all clinical programs the department supported, total expenditures and beneficiaries, the percent of program beneficiaries who are uninsured, expenditures on the uninsured,<sup>13</sup> and sources of program funding for FY 2002. Twenty of 24 Maryland's local governments completed and returned the questionnaires on county program expenditures for the uninsured – a response rate of 83 percent. The four counties that did not respond are small in terms of both population and expenditures.

## **Other Public Programs for the Uninsured**

We also collected data on publicly subsidized programs not directly affiliated with the Maryland Department of Health and Mental Hygiene that serve the uninsured – including the Federally

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<sup>13</sup> As with DHMH programs discussed above, we used actual expenditures on the uninsured when supplied; otherwise, we estimated this by multiplying total expenditures by the proportion of beneficiaries who are uninsured.

Qualified Health Center (FQHC) program and the Maryland School-Based Health Center (SBHC) program.

### **C. Results**

Data obtained from Maryland DHMH program administrators show a total of \$408.6 million in state health program expenditures on the uninsured. \$296.5 million (73 percent), of this total is State spending, while \$93.1 million (23 percent) is from federal funds (Table 3). The remainder is from unidentifiable sources. The largest overall component is mental health – with \$187 million spent by the State on inpatient psychiatric facilities providing care to the uninsured and \$65.7 million spent on outpatient (fee-for-service) public mental health services. Together, mental health services accounts for 62 percent of state-level health program expenditures on the uninsured. Alcohol and drug abuse treatment services accounted for the next largest component of state program expenditures on the uninsured, totaling \$61.8 million, or 15 percent of total spending on the uninsured at the state level.

**Table 3. State Programs – Expenditures on the Uninsured, with Sources of Funding<sup>14</sup>**

Program	Total Exp. on the Uninsured FY 2002 (\$ millions)	Sources of Funding		
		Federal	State	Other
State AIDS Administration	\$12.8	100%		
Pharmaceutical Programs				
Pharmacy Assistance	\$32.0	50%	50%	
AIDS Drugs Assistance	\$14.3	100%		
Adult Health/Primary Care				
MD PrimaryCare	\$7.0		100%	
Family Planning Waiver	\$2.6	90%	10%	
Title X Family Planning	\$7.3	26%	74%	
Children's Health	\$2.2	100%		
Mental Health				
Public Mental Health	\$65.7	40%	50%	10%
State Psychiatric Facilities	\$187.0		100%	
Breast and Cervical Cancer	\$13.3	9%	91%	
Alcohol and Drug Abuse	\$61.8	26%	58%	16%
Cigarette Restitution Fund	\$2.6			100%
<b>Total</b>	<b>\$408.6</b>	<b>\$93.1</b>	<b>\$296.5</b>	<b>\$19.0</b>

At the local government level, our analysis of the 20 completed questionnaires showed a total of \$130 million in clinical program expenditures on the uninsured (Table 4). Of this amount, 77.2 percent has an identifiable source. The programs accounting for the largest proportion of spending include addiction services – for which counties spent \$55.3 million on the uninsured – communicable diseases, which accounted for \$26.0 million, and mental health services, with \$24.3 million in spending on the uninsured at the local government level.

<sup>14</sup> For the Pharmacy Assistance Program, the State did not receive federal matching funds for this program until FY 03. We have applied full-year matching federal funds since continuation of federal funding for this program is anticipated.

**Table 4. Local Government Expenditures on the Uninsured (\$ '000) – Clinical Expenditures Only, by Program and Source**

Programs	Total Clinical Expenditures	Source			
		Federal	State	County	Other / Unidentifiable
Addictions	\$55,255	\$5,854	\$41,589	\$2,213	\$5,599
Adult Health	\$3,831	\$18	\$2,481	\$986	\$345
Child Health	\$1,734	\$131	\$986	\$603	\$13
Communicable Dis.	\$25,966	\$22,810	\$1,164	\$1,420	\$572
Dental	\$2,802		\$1,417	\$1,386	
Family Planning	\$8,484	\$2,772	\$3,548	\$1,079	\$1,086
Maternity	\$2,413	\$195	\$628	\$1,377	\$213
Mental Health	\$24,327	\$14	\$2,415	\$76	\$21,823
Specialty	\$1,330	\$425	\$868	\$8	\$28
Screenings	\$1,180	\$91	\$1,021		\$68
Other	\$2,901	\$1,155	\$1,520	\$227	
<b>Total</b>	<b>\$130,223</b>	<b>\$33,466</b>	<b>\$57,650</b>	<b>\$9,388</b>	<b>\$29,746</b>
<b>% of Total</b>		<b>25.7%</b>	<b>44.3%</b>	<b>7.2%</b>	<b>22.8%</b>

\$9.4 million of local-level expenditures on the uninsured are financed directly by local governments – 7.2 percent of total spending at this level. \$33.5 million (25.7 percent) comes from federal funds, and \$57.7 million (44.3 percent) from the State. In our summary results, we do not include the State’s contribution to local government programs, as we have already counted the majority of this in the DHMH program expenditures. Funds for many DHMH programs that serve the uninsured are channeled through local government health departments, which provide and coordinate services at the local level. We do include the \$9.4 million in county funds as well as the \$33.5 million in federal funds in our tally, as these represent additional spending on the clinical programs for the uninsured. There is slight potential for overlap of the federal funds counted here and in the DHMH program expenditures. However, since the survey questionnaire directed respondents to mark “Federal” as the source of funding only if funds were received directly from the federal government (but to mark “State” even if a state grant may contain some funds originating with the federal government), most of the federal funds here should be distinct from those counted in DHMH program expenditures. The Federal government does grant some funds directly to counties, for example, disbursing Title II AIDS

funding directly to Baltimore City, which then distributes these funds to other Maryland counties.

Despite the possibility of double-counting a small portion of the federal funds, we believe that the totals from the county questionnaires, \$9.4 million in local government funds and \$33.5 million in federal funds, likely underestimate expenditures on the uninsured, as respondents were unable to estimate for many of the programs listed the percent of program beneficiaries who are uninsured, expenditures on the uninsured, and sources of funding; in these cases, we were unable to include the expenditures in our totals. In the summary results, we do not include the \$29.7 million in local-level expenditures that do not have an identifiable source.

Federally qualified health centers (FQHCs) in Maryland spent \$10.8 million on care for the uninsured in FY 2001 (Bureau of Primary Health Care 2001).<sup>15</sup> Of these expenditures, \$6.4 million (58.9 percent) came from federal government funds, \$2.7 million (24.7 percent) from state and local funds, \$0.57 million (5.3 percent) from philanthropic sources (counted in Section II-4 of this report), and \$1.2 million (11.2 percent) from other sources.<sup>16</sup>

School-Based Health Centers (SBHCs) spent \$4.7 million in 1999-2000 in Maryland (Center for Health and Health Care in Schools 2001) – equal to \$5.2 million in FY 2002 after updating for inflation. In order to obtain expenditures on the uninsured, we multiplied this figure by the percent of children in Maryland under age 18 who are uninsured in the March 2003 CPS, 9.1 percent, to get \$0.47 million. The 2002 Maryland School-Based Health Center Annual Report calculates that 47 percent of SBHC funds are from the State, 25 percent from local governments, and 4 percent from the Federal Government.

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<sup>15</sup> Calculated by subtracting the average of the amount of self-pay charges collected in CYs 2001 and 2002 (\$2,214,261) from the average of total self-pay charges from these years (\$13,034,726).

<sup>16</sup> The distribution of payers is calculated by applying the distribution of non-patient revenues (averages from 2001 and 2002) to the amount of unreimbursed self-pay charges.

### **3. Physician Ambulatory Services**

#### **A. Introduction**

Charity care provided by physicians represents a major source of care for the uninsured and a significant source of expenditures for this population. Previous estimates, compiled from surveys by the American Medical Association (AMA) and the American Hospital Association (AHA) indicate that nationwide physicians spend a greater amount on care for uninsured patients than do hospitals – \$21.1 billion vs. \$16.6 billion, respectively, in 1994 (Cunningham and Tu 1997). The study cited earlier by the Texas State Comptroller’s Office (1999) used a survey conducted by the Texas Medical Association and other sources to show that in the state of Texas, physician charity care accounted for 19 percent of health care expenditures for the uninsured – the second largest category of these expenditures after hospital uncompensated care.

#### **B. Methods**

We used Maryland-specific data from two national surveys of physicians to calculate the amount and value of unreimbursed time that physicians contribute to uninsured patients on an outpatient basis. The question is a difficult one to research. MedChi – Maryland’s physician association – does not maintain data on this subject. The Maryland Bureau of Physician Quality Assurance (BPQA) asks two questions on physician licensure renewal applications: (1) whether physicians offer uncompensated (charity) care; and (2) whether they offer a sliding fee scale based on ability to pay. We obtained these data from the BPQA for all physicians in the state of Maryland, but with only “Yes”, “No”, and “Not Applicable” as possible responses, we were unable to quantify the amount, and therefore expenditures, of physician charity care provided in Maryland.

Our primary data sources for estimating the value of time contributed by physicians on an outpatient basis are therefore the national Community Tracking Survey (CTS) from 2001, and the American Medical Association (AMA) Socioeconomic Monitoring System (SMS) survey. We analyzed the most recent available results from the SMS – from 1999. The CTS is a national survey of physicians with two sites in Maryland – the Washington, DC suburbs and the City of Baltimore. The CTS is conducted by the Center for Studying Health System Change, located in

Washington, DC. The 2001 sample includes 323 physicians in Maryland – the sample that we analyzed. The 1999 AMA Socioeconomic Monitoring System (SMS) survey included 3,341 non-federal patient care physicians in the United States. We separately analyzed the samples for Maryland (N = 87) and for the South Atlantic region (N = 598).<sup>17</sup> Since these results were consistent, we used the results from the Maryland-only sample.

We calculated the numbers of generalist and specialist physicians in Maryland using data from the Maryland Health Care Commission (MHCC 2000). We assigned average salaries to these groups using salary figures provided by the MHCC and the Center for Studying Health System Change (Reed and Ginsburg 2003).<sup>18</sup>

### **C. Results**

In 1997, there were 312 active physicians in Maryland per 100,000 population (MHCC 2000). Applying this ratio to the 2001 population of 4.8 million people yields a total of 14,851 physicians. We add 2,500 to this figure, based on MHCC estimates of the growth in the number of physicians in the State from 1997 to 2002. Of the resulting 17,351 active physicians in Maryland, we calculated that there are 5,784 primary care physicians, and 11,567 specialists – using the ratio of generalists to specialists found in the 2000 MHCC report. The average salaries for generalists and specialists providing charity care in Maryland are also taken from the Community Tracking Survey – on an annual basis these salaries are \$127,046 for generalists and \$154,496 for specialists.

Table 5 and Table 6 provide the results. The AMA survey shows that 76.3 percent of primary care physicians in Maryland, and 71.5 percent of specialists, provide some charity care. For those that do so, the average number of hours per week is 12.1 for primary care doctors and 8.6 for specialists. Time committed to charity care as a percentage of work time is 18.2 percent for

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<sup>17</sup> The AMA South Atlantic region includes Delaware, the District of Columbia, Georgia, Florida, Maryland, North Carolina, South Carolina, Virginia, and West Virginia.

<sup>18</sup> See also the HSC website – “Physicians' Net Income from Practice of Medicine, 1999, and Percent Change, 1995-1999”. <http://www.hschange.com/CONTENT/544/#table1>

primary care physicians and 8.6 percent for specialists. Applying these numbers to the number of physicians in each category and the average salaries reported above yields a total result of \$287.4 million in physician charity care in Maryland in 1999 – with 53 percent of this amount provided by specialists and 47 percent by generalists (Table 5).

**Table 5. Outpatient Physician Charity Care – AMA Survey**

Type of Physicians	Number Practicing	Average Salary	Percent Practicing Charity Care	Number Practicing Charity Care	Hours per Week for Those Practicing	Percent of Time for Those Practicing	Total Value (\$ millions)
Primary Care	5,784	\$127,046	76.3%	4,413	12.1	18.2%	\$133.7
Specialists	11,567	\$154,496	71.5%	8,271	8.6	8.6%	\$153.7
<b>Total</b>	<b>17,351</b>	<b>\$145,346</b>	<b>73.1%</b>	<b>12,684</b>	<b>9.8</b>	<b>11.9%</b>	<b>\$287.4</b>

The 2001 Community Tracking Survey shows quite different results. Of the 323 physicians interviewed in Maryland, 220 (68.1 percent) provided some charity care. Among those providing charity care, the average hours per month of doing so is 8.4 for primary care physicians; 7.0 for specialists. Based on total average working hours per week of 55.1 for primary care physicians; 50.6 for specialists, the resulting percentage of time spent on charity care for those who provide it is just 3.6 percent – compared to the AMA estimate of 11.9 percent. As a result, the CTS yields an overall estimate of the value of physician charity care in Maryland of \$89.8 million.

**Table 6. Outpatient Physician Charity Care – CTS Survey**

Type of Physicians	Number Practicing	Average Salary	Percent Practicing Charity Care	Number Practicing Charity Care	Hours per Week for Those Practicing	Percent of Time for Those Practicing	Total Value (\$ millions)
Primary Care	5,784	\$127,046	68.1%	3,939	2.1	3.8%	\$28.0
Specialists	11,567	\$154,496	68.1%	7,877	1.8	3.5%	\$61.8
<b>Total</b>	<b>17,351</b>	<b>\$145,346</b>	<b>68.1%</b>	<b>11,816</b>	<b>1.9</b>	<b>3.6%</b>	<b>\$89.8</b>

We updated both the AMA and CTS estimates to 2002 dollars using the Bureau of Labor Statistics rates of inflation for medical services (BLS 2003). The resulting AMA and CTS estimates are, respectively, \$327.3 million and \$94.1 million.<sup>19</sup> Since both surveys are scientifically sound and reputable, for our summary results we use the midpoint of these two estimates – \$210.7 million in physician outpatient charity care.

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<sup>19</sup> The IOM study of the costs of non-insurance found the same discrepancy between the AMA and CTS results at the national level (IOM 2003a).

## 4. Philanthropic Spending

### A. Introduction

Philanthropic spending in the health field comes from two main sources. Individuals and corporations give to charities, such as the Red Cross, United Way, American Cancer Society, and other groups, which then deliver services directly or, more commonly, underwrite services delivered by nonprofit groups and health care providers. From 1997-2001, giving to large charitable organizations rose by an average of 12 percent annually. This growth stopped in 2002, however. A new report estimates that in 2002, the nation's largest 400 charities received \$46.9 billion in contributions, down 1.2 percent from 2001. Giving to the arts and to health groups fell by 22.7 percent (Winter 2003).

A second source of philanthropy in health is grants from a variety of foundations. After six consecutive years of double-digit percentage growth in foundation support, this sector is also poised for moderate contraction. Despite the economic downturn and decline of the stock market in recent years, the Foundation Center projected that giving by the country's nearly 62,000 grantmaking foundations would remain steady at an estimated \$30.3 billion in 2002, virtually unchanged from \$30.5 billion in 2001 and up from \$27.6 billion in 2000. An estimated 10 to 12 percent loss in the value of foundation assets in 2002, however, following a nearly 4 percent decrease in 2001, suggest that overall foundation giving will decline in 2003 (Foundation Center 2003).

To date, there have been no specific reports concerning foundations and health-related giving. According to a senior staff member at Grantmakers in Health<sup>20</sup>, the diversity of health funders makes generalizations difficult. For example, the David and Lucile Packard Foundation lost about sixty percent of its assets in the stock market decline because they were significantly invested in Hewlett-Packard stock. The Robert Wood Johnson Foundation, by contrast, has

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<sup>20</sup> Grantmakers in Health is a non-profit, educational organization dedicated to helping foundations and corporate giving programs improve the nation's health. GIH generates and disseminates information about health issues and grantmaking strategies that work in health by offering issue-focused forums, workshops, and large annual meetings; publications; continuing education and training; technical assistance; consultation on programmatic and operational issues; and by conducting studies of health philanthropy.

fares better because Johnson and Johnson has performed well in a down market, as has the W.K. Kellogg Foundation which is heavily invested in the Kellogg cereal company. Additionally, a number of health funders have made strong statements about their commitments to maintain their prior level of grantmaking for at least another year or two. These include The California Wellness Foundation and The Annie E. Casey Foundation.

However, even if philanthropic support in the health field continued to experience its unprecedented growth of the late 1990s, it would still only account for a tiny fraction of the more than \$1.5 trillion spent annually on health services and programs in this country.<sup>21</sup> Nationally, philanthropic funds amount to only 0.1 percent of all governmental health spending (Knott and Weissert 1995). Moreover, support for direct health services and health policy represents only a small part of the philanthropic community's interest in improving health. The vast majority of health grantmaking goes directly to biomedical research, health care providers, and programs aimed at specific diseases (Beatrice 1993; Lawrence 2001).

In some states, the creation of "conversion foundations" (entities created by the conversion of non-profit health plans to for-profit status) has dramatically increased health grantmaking. Yet even in California, which has a number of large, well-endowed conversion foundations – there is only one dollar of philanthropic spending for every 20 dollars of governmental spending for health care (Ferris and Graddy 2001; Oliver and Gerson 2003).<sup>22</sup>

At this time, Maryland has no major conversion foundations that could direct a significant amount of funds to services for the uninsured. In 1997, lawmakers anticipated that Blue Cross and Blue Shield of Maryland (CareFirst) was likely to convert from a non-profit to a for-profit corporation, and some portion of its assets would then likely be transferred to a foundation to

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<sup>21</sup> Historically, this was not always the case. In the 1920s, spending by newly organized foundations was about 90% of federal government spending on health; by 1973 it fell to 16% and by 1991 it amounted to only 0.4% of federal health spending (Weissert and Knott 1995, 277).

<sup>22</sup> In a 2003 study, Grantmakers in Health identified 165 conversion foundations nationally, with total assets exceeding \$16.4 billion (GIH 2003). They are often the largest source of non-governmental health funding in a community or state (Williams and Brelvi 2000, 258). Though California conversion foundations make up less than 10% of such foundations, they hold nearly half of all these assets (Ferris and Graddy 2001). Still, California health philanthropy totals less than \$10 per person.

avoid inappropriately enriching new stockholders. That year, the General Assembly passed Senate Bill 478, which created the Maryland Health Care Foundation. The foundation was established as a charitable, non-profit organization whose stated purpose was “to promote public awareness of the need to provide more timely and cost-effective care for Marylanders without health insurance and to receive moneys that can be used to provide financial support to programs that expand access to health care services for uninsured Marylanders” (MHCF 1999).

The conversion of Blue Cross and Blue Shield has not materialized, however. Indeed, the General Assembly in 2003 vetoed CareFirst’s planned sale to Wellpoint Health Plans and barred the company from conversion or sale for a period of five years. Given these delays, the Maryland Health Care Foundation had to operate with very little funding to accompany its administrative superstructure. It adopted a modest strategy “to fill gaps in health care services delivery” through grantmaking authorized in the 1997 legislation. In its initial grantmaking, the foundation focused on prevention and primary care for uninsured and underinsured individuals. As of the summer of 2003, the foundation ceased operations.

Philanthropic entities in Maryland have invested in direct health care services for the uninsured, but generally in small amounts. They have typically chosen other issues in which to invest more heavily or adopted other ways to leverage their limited resources in addressing the needs of persons without health insurance. In some instances, Maryland foundations and other charitable organizations have opted to spend money on capital projects, such as health care clinics or research centers. Others provide core support to organizations that deliver a blend of health and social services, making it difficult to obtain even general estimates of their spending on the uninsured.

For example, the annual spending by Catholic Charities of the Archdiocese of Baltimore (CCAB) totals millions of dollars. However, we were unable to include CCAB spending in this report. According to the CCAB’s director of finance, it is difficult to extract a precise amount for spending on the uninsured from CCAB’s budget for two reasons. The first is that budgets are reported for service settings, not the specific type of services rendered in those settings. As such, there is no specific line or lines in the budget for health care services only. In any individual

setting, Catholic Charities may deliver multiple types of services – behavioral, residential treatment, primary care – and these apparently are not clearly delineated in their budget. A second reason is that spending is not accounted for on the basis of source of coverage. CCAB accepts Medical Assistance, private insurance and self-pay, and it is not clear what proportion of the population they serve is completely uninsured. This example is illustrative of the difficulties in trying to estimate philanthropic spending on the uninsured.

## **B. Methods**

There is no centralized database of philanthropic spending on health care services generally or for health care for the uninsured specifically. The Foundation Center – a collector, clearinghouse and analyst of philanthropic data – conducts surveys of philanthropic organizations. However, these surveys are generally based on representative national sampling and do not capture all philanthropic organizations. Grantmakers in Health, an organization that generates and disseminates information about health philanthropy issues and grantmaking strategies, does not maintain such a database. Finally, the National Center for Charitable Statistics database does not include variables relevant for our purposes.

Because no single data source provided complete, unambiguous, and precise information, we adopted numerous data collection tactics. We performed Internet searches of: foundation, non-profit and provider websites; news items related to philanthropic spending for health care services and health policy; and databases of philanthropic assets and spending. We also reviewed annual reports and other organizational materials from philanthropic, non-profit and provider organizations. Most importantly, we conducted telephone and in-person interviews with foundation staff and administrators of health care facilities serving the uninsured. A list of the individuals we interviewed is provided in Appendix 5 – .

It is important to note that we opted to track philanthropic spending primarily through health care providers rather than through philanthropic organizations. We did so for two reasons. One is that few of the foundations we contacted systematically support direct services or premium subsidies to the uninsured, if they support such services at all. A second, related reason is that

many providers serving the uninsured cobble together support from a multitude of philanthropic grants and individual donors. As such, it seemed more sensible to derive our estimates primarily from providers.

Since these providers have multiple funding sources and most serve a mix of insured, underinsured and uninsured clients, we asked each site administrator to provide an estimate of the dollars they received from philanthropic donations in FY 2002, as well as the percent of uninsured clients they serve. In Federally Qualified Health Centers (FQHCs), which derive the majority of their funding from the federal government, there is a rather varied picture. We contacted the executive directors of a dozen FQHCs in Maryland and spoke with ten of them. In most cases, philanthropic dollars represent no more than 5 percent of a given FQHC's operating budget. Our interviews indicated that these dollars support a wide range of activities, including non-clinical services, infrastructure, advocacy, capacity-building, and health promotion.

Our estimates are an underestimate of the amount of philanthropic spending on the uninsured. Because of the complexity of funding flows and the wide variety of organizations involved in this field, we were unable to systematically capture all sources and flows of funds. Some organizations that provide this type of assistance do not keep their records in such a way that would make it possible to easily identify uninsured recipients. Undoubtedly there are organizations that provide medical assistance to the uninsured in the State that we were not able to identify.

### **C. Results**

The data on philanthropic spending on the uninsured are summarized in Table 7, below. For 2002, we identified a total of \$12,148,684, about \$18 per person for the approximately 691,500 Maryland residents who are uninsured. While this figure may fall within the range of philanthropic contributions in other states, clearly it is very small relative to the financial resources needed to provide universal insurance coverage.

**Table 7. Philanthropic Spending on Health Services for the Uninsured**<sup>23, 24</sup>

Organization or Source	Services Provided	Expenditures on the Uninsured FY 2002 (\$ millions)
Pharmaceutical contributions through MEDBANK of Maryland	Prescription medications	\$3.3
United Way of Central Maryland**	Support to service providers	\$2.0
Kaiser Permanente of the Mid-Atlantic	Insurance and premium subsidies	\$1.7
Bon Secours Community Commitment	Primary care and support services	\$0.8
FQHCs	Primary care services	\$0.8
The Health Alliance Clinic	Primary and specialty care services	\$0.7
Mission of Mercy	Primary care services	\$0.6
Maryland Health Care Foundation	Support to service providers	\$0.5
Community Free Clinic (Hagerstown, MD)	Primary care services	\$0.4
Planned Parenthood of Maryland	Primary and reproductive care services	\$0.4
St. Clare Medical Outreach	Primary care services	\$0.4
Shepherd's Clinic, Inc.	Primary care services	\$0.2
Open Gates Health Center	Primary care services	\$0.2
Lillian Wald Community Nursing Clinic	Primary care services	\$0.2
<b>Total</b>		<b>\$12.1</b>

Based on the range of estimates of the proportion of clients who are uninsured from other organizations in this study, we assume that approximately 50 percent of the individuals served by United Way member agencies are uninsured. Therefore, our final total for United Way of Central Maryland spending on the uninsured is one-half of the estimated spending on health care services, or \$1,960,009.

<sup>23</sup> This table is not intended as a comprehensive listing of all organizations providing healthcare to the uninsured.

<sup>24</sup> The United Way of Central Maryland does not track the amounts its member agencies spend on services for the uninsured. Many of the member agencies deliver a blend of services – health care, behavioral, social, personal – thus making it difficult to identify how much is specifically spent on health care services. Our estimate of \$1,960,009 is based on the following data and assumptions:

- \$56,000,257 spent on “Human Care Services” in FY02
- 14% of the above amount spent on “Direct Services”
- $\$56,000,257 \times .14 = \$7,840,036$  total spending on direct services

After reviewing the directory of member agencies, we conservatively estimate that health care services account for approximately 50% of the “Direct Services” category. Based on this assumption, our estimate of United Way spending on health care services amounts to \$3,920,018.

These findings should be interpreted carefully. The estimates presented in Table 7 do not reflect all philanthropic spending aimed at the problems of the uninsured. There is a sense among foundation officers and provider staff we spoke with that philanthropic support for direct health care services is a “bottomless pit.” Most do not see philanthropic funding of direct services as a sustainable strategy. As noted earlier, some foundations – the Harry and Jeanette Weinberg Foundation chief among them – have opted to invest their resources in capital projects (building health care facilities) where the uninsured may receive health care services. Others have opted to support public policy initiatives aimed at expanding coverage to the uninsured, such as the Maryland Citizens’ Health Initiative. This initiative has received philanthropic support from national foundations (RWJF, Annie E. Casey Foundation, Kellogg Foundation), as well as local foundations (Abell Foundation, Baltimore Community Foundation, Consumer Health Foundation).

The data in Table 7 also do not capture all possible philanthropic spending across the state of Maryland. Most of our research efforts were focused on philanthropic spending in Central Maryland. While the reported spending by Kaiser Permanente and FQHCs includes services in communities outside of Central Maryland, we have almost certainly under-reported philanthropic spending in rural counties throughout the state. Nonetheless, we believe we have identified the largest, most readily accessible sources of philanthropic support. Even if we were able to track down all the philanthropic dollars supporting health care services to the uninsured in Maryland, they would still cover only a very small portion of the total costs generated inside and outside the health care system by uninsured state residents.

## **5. Uninsured Individuals' Costs**

### **A. Introduction**

Uninsured individuals accrue considerable direct health expenditures. The IOM study of the costs of non-insurance found uninsured individuals' out-of-pocket costs totaled \$641 per capita in 2001. Earlier analysis, of the 1996 Medical Expenditure Panel Survey (MEPS) showed that individuals who were uninsured for the full year spent more out-of-pocket on health care than those who were privately insured for the full year – \$426, compared with \$402. After taking into account the fact that the average income of those uninsured in 1996 was between \$20,000 and \$29,000, compared to over \$50,000 for those with private coverage, the difference in expenditures as a percentage of income is substantial (Fronstin, 2002).

### **B. Methods**

We use the most recently available MEPS survey, from calendar year 2000. Because MEPS data are not available on a state-by-state basis – and the sampling frame is not intended for state-specific analysis – we use the Northeast region as a proxy for Maryland.<sup>25</sup> Compared to data compiled for national health accounts by the Center for Medicare and Medicaid Services (CMS), the MEPS systematically underestimates health expenditures by a factor of 1.25 – even after subtracting defense spending and institutional spending from the national level data (Hadley and Holahan 2003c). To correct for this underreporting, we use Hadley and Holahan's estimate and multiply our aggregated estimate of MEPS out-of-pocket spending by 1.25.

### **C. Results**

The 2000 MEPS shows an average of \$1,045 in health spending for full-year uninsured individuals under the age of 65 in the Northeast region, compared to \$2,257 for those insured. Out-of-pocket expenditures represent \$334 (32 percent) of total health spending for the uninsured – compared to 17 percent for those insured. Updated for medical inflation, this

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<sup>25</sup> Maryland is part of the South Atlantic region in the MEPS and not the Northeast. However, Maryland is demographically and economically closer to the states in the Northeast than to states in the South Atlantic. For this reason, we opted to use the Northeast region.

amount is equal to \$368 in 2002 dollars (BLS 2003). We multiplied this amount by 1.25 to account for the MEPS underreporting of health spending (Hadley and Holahan 2003c), and then multiplied the resulting per-person amount of \$459 by 691,500 – the number of full-year uninsured in Maryland in FY 2002.<sup>26</sup> The result is an estimated total out-of-pocket spending by the uninsured of \$318 million.

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<sup>26</sup> See Section III of this report for the calculation of the number of full-year uninsured individuals in Maryland using the Current Population Survey.

## 6. Lost Health Status and Added Risk

### A. Introduction

Intuitively and empirically, people who lack health insurance coverage receive fewer health services than those that are insured and, as a result, also have poorer health status (IOM 2003b). The Institute of Medicine report *Hidden Costs, Value Lost – Uninsurance in America* sought to place an economic value on these health losses, as well as the added financial risk and discomfort arising from the uncertainty affecting individuals and families who lack coverage (IOM 2003a). In contrast to other parts of our study, these costs are not direct expenditures for or by the uninsured – and they are not capturable by the health system should an expansion of health insurance occur. However, they do represent real losses to uninsured families and individuals, and – as a result – to society as a whole.

### B. Methods

The costs of health status losses and added risk are difficult to quantify. Rather than providing a competing approach to the work of the Institute of Medicine committee, we choose to follow their approach. This approach quantifies the economic value of a year of life in perfect health at a value of \$160,000, based on a review of the literature that found a range of values from contingent valuation studies from \$59,000 to \$1,176,000 per year of life (Hirth et al 2000). Health losses are then subtracted from this amount based on Quality Adjusted Life Years – a measure of combined mortality and morbidity.<sup>27</sup>

Nationwide, an estimated 18,000 premature deaths can be attributed to lack of insurance coverage annually (IOM 2002). Using a rate of three percent to discount future healthy life years in relation to the present, the result is a range of \$1,645 to \$3,280 for a year spent without health insurance coverage – for a total annual value of \$65 to \$130 billion in lost health status nationwide (Vigdor 2003). Similarly, the IOM estimates an annual nationwide total of \$1.6 to

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<sup>27</sup> A value of \$160,000 to a year of life in perfect health corresponds to an average value of \$4.8 million for a statistical life, assuming a 3% discount rate and a life expectancy at birth of 76 years. This is comparable to a range of values of \$3 to \$7 million for a statistical life used by federal regulatory agencies to evaluate the economic costs and benefits of risk reduction and life-saving interventions (Vigdor 2003).

\$3.2 billion in costs due to added risk and financial uncertainty for uninsured individuals and families. This estimate is equal to a range of \$40 to \$81 per uninsured person.

### **C. Results**

For health status losses, we use the IOM range limits of \$1,645 to \$3,280 per person as our low and high limits. We multiply these numbers times the average number of full-year uninsured during FY 2002, 691,500, to obtain an aggregate estimate for the State of Maryland of \$1.1 to \$2.3 billion in health status losses due to a lack of health insurance coverage. For losses due to uncertainty, we multiply use the range of \$40 to \$81 per uninsured person to obtain an aggregate value for Maryland of \$28.0 million (low estimate) to \$56.0 million (high estimate).

## IV. Summary and Total Costs per Full-Year Uninsured Person

### 1. Summary Results

Overall, annual economic losses related to non-insurance in Maryland totaled \$2.4 to \$3.7 billion dollars in FY 2002 (Table 8). Between \$1.1 and \$2.3 billion of this amount is due to losses to individuals in terms of decreased health status and increased financial uncertainty. \$318 million is spent directly by uninsured individuals as out-of-pocket health care expenditures. The health system – including public and private healthcare payers, philanthropic contributions, and donations from private physicians – spends between \$0.9 million and \$1.1 billion on the uninsured. Public health programs account for \$462 million of this amount.. Uncompensated hospital care accounts for between \$254 and \$370 million of this amount; this range reflects different estimates of the percentage of charity care and bad debt reported by hospitals that goes to uninsured patients rather than insured ones.

**Table 8. Total Expenditures and Costs Related to Non-Insurance, by Component**

Component	Value FY 2002 (\$ millions)		% of Total (Low Estimate)
	Low Estimate	High Estimate	
1. Hospital Care	\$253.9	\$370.3	10.5%
2. Other Public Subsidies :			
Statewide programs	\$408.6	\$408.6	16.9%
County-level	\$42.9	\$42.9	1.8%
FQHCs	\$10.0	\$10.0	0.4%
School-based health	\$0.5	\$0.5	0.0%
3. Physician Services	\$210.7	\$210.7	8.7%
4. Philanthropic Spending	\$12.1	\$25.4	0.5%
5. Individuals' Out of Pocket	\$317.7	\$317.7	13.1%
6. Health Status Losses	\$1,137.5	\$2,268.1	47.0%
7. Losses from Risk	\$28.0	\$56.0	1.2%
<b>Total</b>	<b>\$2,422</b>	<b>\$3,710</b>	<b>100%</b>

The State Government is the largest single contributor to direct expenditures for the uninsured, spending \$334 million to \$343 million (Table 9). Through public health programs, the State paid

for \$311 million in services for uninsured individuals in FY 2002. Additionally, the State contributed between \$20 and \$29 million to spending on uninsured hospital patients through hospital payment rates, and also paid funds to FQHCs and school-based health programs. The federal government paid between \$139 and \$203 million for the uninsured through the Maryland's hospital payment system, and also contributed \$138 million through public health programs and Federally Qualified Health Centers. Local governments directly contributed \$10 million on spending for the uninsured (see Appendix 1 – Total Expenditures and Costs Related to Non-Insurance, by Source).

**Table 9. Total Expenditures and Costs Related to Non-Insurance, by Source**

Payer	Value FY 2002 (\$ millions)		% of Total (Low Estimate)
	Low Estimate	High Estimate	
Federal Government	\$277	\$341	11.4%
State Government	\$334	\$343	13.8%
Local Governments	\$10	\$10	0.4%
Private Payers	\$318	\$375	13.1%
Individual Out of Pocket and Health Losses	\$1,483	\$2,642	61.2%
<b>Total</b>	<b>\$2,422</b>	<b>\$3,710</b>	<b>100%</b>

Private payers contribute \$318 million to \$375 million in direct expenditures for the uninsured. Private insurance companies paid between \$95 and \$139 for the uninsured through hospital rates under Maryland's all-payer system – an amount reflected in higher insurance premiums for privately insured individuals. In addition, private physicians contributed an estimated \$211 million in charity care – uncompensated care provided to uninsured individuals. Private philanthropic spending accounted for an additional \$12 to \$25 million (see Appendix 1 – Total Expenditures and Costs Related to Non-Insurance, by Source).

To calculate expenditures and costs related to a lack of insurance on a per-capita basis, we use estimates from the Current Population Survey (CPS) to determine the number of uninsured individuals in Maryland. The March CPS includes questions on health insurance status related to the previous calendar year. The March 2002 CPS found that there were 653,000 full-year uninsured residents in Maryland in calendar year 2001. The March 2003 CPS shows a substantial increase in the numbers of full-year uninsured, to 730,000 in calendar year 2002.<sup>28</sup> Since the time period for expenditures and costs for our study is fiscal year 2002 (July 2001 to June 2002), we use the average of the March 2002 and March 2003 surveys. The resulting estimate of the number of full-year uninsured individuals under the age of 65 is 691,500. Individuals age 65 and over are considered to be covered by Medicare.

On a per-capita basis, individuals paid \$459 directly out-of-pocket for health services, and suffered the equivalent of an additional \$1,645 to \$3,280 in health status losses (Table 10). Total expenditures and costs per uninsured person are equal to a range from \$3,502 (low estimate) to \$5,365 (high estimate).

**Table 10. Expenditures and Costs Related to Non-Insurance, per Uninsured Person, by Component**

Component	Expenditures per Uninsured Person		% of Total (Low Estimate)
	Low Estimate	High Estimate	
1. Hospital Care	\$367	\$536	10.5%
2. Other Public Subsidies :			
Statewide programs	\$591	\$591	16.9%
County-level	\$62	\$62	1.8%
FQHCs	\$14	\$14	0.4%
School-based health	\$1	\$1	0.0%
3. Physician Services	\$305	\$305	8.7%
4. Philanthropic Spending	\$18	\$37	0.5%
5. Individuals' Out of Pocket	\$459	\$459	13.1%
6. Health Status Losses	\$1,645	\$3,280	47.0%
7. Losses from Risk	\$40	\$81	1.2%
<b>Total</b>	<b>\$3,502</b>	<b>\$5,365</b>	<b>100%</b>

<sup>28</sup> The CPS results are available at the Census Bureau website – [www.census.gov/hhes/hlthins/historic/hihist4.html](http://www.census.gov/hhes/hlthins/historic/hihist4.html).

The State and local governments spent between \$497 and \$510 per uninsured person in FY 2002 (Table 11). The Federal Government spent an additional \$401 to \$493 per person. Private payers – including insurance, physicians, and philanthropy – accounted for between \$460 and \$542 per person.

**Table 11. Expenditures and Costs Related to Non-Insurance, per Uninsured Person, by Source**

Payer	Expenditures per Uninsured Person		% of Total (Low Estimate)
	Low Estimate	High Estimate	
Federal Government	\$401	\$493	11.4%
State Government	\$483	\$496	13.8%
Local Governments	\$14	\$14	0.4%
Private Payers	\$460	\$542	13.1%
Individual Out of Pocket and Health Losses	\$2,145	\$3,820	61.2%
<b>Total</b>	<b>\$3,502</b>	<b>\$5,365</b>	<b>100%</b>

## 2. Expenditures and Costs by Component and Source

Table 12 and Table 13 below show expenditures on the uninsured within the health system as, respectively, total amounts and per-capita expenditures on the uninsured. We have categorized the health system to include public and private payers, including private health insurance, the value of time contributed by private physicians, and direct contributions from philanthropic organizations. Defined in this manner, there were total expenditures of \$939 million to \$1.1 billion on the uninsured within the health system in Maryland in FY 2002 (Table 12). This amount is equivalent to \$1,358 to \$1,545 per full-year uninsured resident (Table 13).

**Table 12. Total Expenditures and Costs Related to Non-Insurance, by Component and Source – Excluding Individual Payments and Losses**

Component	Value FY 2002 (\$ millions) - by Source							Total	
	Federal Government		State Government		Local Gov't	Private Payers			
	Low	High	Low	High		Low	High	Low	High
1. Uncompensated Hospital Care	\$139	\$203	\$20	\$29		\$95	\$139	\$254	\$370
2. Other Public:									
State programs	\$98	\$98	\$311	\$311				\$409	\$409
County-level FQHCs	\$33.5	\$33.5			\$9.4			\$42.9	\$42.9
School health	\$6.8	\$6.8	\$3.2	\$3.2				\$10.0	\$10.0
	\$0.1	\$0.1	\$0.2	\$0.2	\$0.1			\$0.5	\$0.5
3. Physicians						\$211	\$211	\$211	\$211
4. Philanthropy						\$12	\$25	\$12	\$25
Total	\$277	\$341	\$334	\$343	\$10	\$318	\$375	\$939	\$1,068

These costs are relatively evenly split among the Federal Government, the State Government, and Private Payers – including private insurance, physicians, and philanthropic organizations. Using the low estimates of per-capita expenditures (Table 13), the Federal Government spends \$401 per uninsured person (30 percent of health system costs). The State Government spends \$483 per uninsured person (36 percent), and Private Payers contribute \$460 (34 percent) per uninsured person. The amount paid directly by the uninsured in out-of-pocket medical expenditures – \$459 per person – is similar in magnitude to the respective contributions from the Federal Government, the State, and the private sector.

**Table 13. Expenditures and Costs Related to Non-Insurance, per Uninsured Person, by Component and Source – Excluding Individual Payments and Losses**

Component	Costs per Uninsured Person - by Source							Total	
	Federal Government		State Government		Local Gov't	Private Payers			
	Low	High	Low	High		Low	High	Low	High
1. Uncompensated Hospital Care	\$201	\$293	\$29	\$42		\$138	\$201	\$367	\$536
2. Other Public:									
State programs	\$141	\$141	\$450	\$450				\$591	\$591
County-level FQHCs	\$48.4	\$48.4			\$13.6			\$62.0	\$62.0
School health	\$9.9	\$9.9	\$4.6	\$4.6				\$14.5	\$14.5
	\$0.2	\$0.2	\$0.3	\$0.3	\$0.2			\$0.7	\$0.7
3. Physicians						\$305	\$305	\$305	\$305
4. Philanthropy						\$18	\$37	\$18	\$37
Total	\$401	\$493	\$483	\$496	\$14	\$460	\$542	\$1,358	\$1,545

### 3. Comparisons with Previous Studies

Our results are consistent with earlier studies completed at the national level, and also add considerable detail not available in these national studies. A study recently commissioned by the Institute of Medicine found overall annual society-level economic costs of \$4,084 per uninsured person in the United States in 2001, compared to our estimate for Maryland of between \$3,502 and to \$5,365 (Table 14). \$641 of the IOM study's expenditures were incurred directly by individuals as out-of-pocket costs, compared to our estimate of \$459. The IOM estimate for total costs within the health system – including public and private payers as well as contributions by physicians and philanthropy but excluding individual costs – is \$1,759 per person. Our study in Maryland provides a corresponding estimate of \$1,358 to \$1,545 per person (Table 13 above).

**Table 14. Comparisons with Previous Studies**

Study, Time Period, and Categories	Cost per Full-Year Uninsured Person		Omitted Categories
<b>State of Texas (FY 1998)</b>	<b>\$963</b>		Health status losses / Public and private insurance / Disability insurance / Penal system / Out-of-pocket spending
Hospital Spending	\$437		
Physician Charity Care	\$252		
State Health Programs and Schools	\$166		
Other Donations and Costs	\$108		
<b>Kaiser Study - National (CY 2001)</b>	<b>\$1,253</b>		State and local / Health status losses / Disability insurance / Penal system
Individual Out of Pocket Costs	\$501		
Institutional Costs	\$752		
<b>IOM Study - National (CY 2001)</b>	<b>\$4,084<sup>1</sup></b>		Disability insurance / Penal system
Individual Out of Pocket Costs	\$641		
Private Insurance and Workers' Comp.	\$587		
Public Insurance and Workers' Comp.	\$335		
Hospitals, Physicians, and Philanthropy	\$837		
Reduced Health Status (lower estimate)	\$1,645		
Added Risk (lower estimate)	\$39		
	<b>Low<sup>2</sup></b>	<b>High<sup>2</sup></b>	
<b>Maryland Study (FY 2002)</b>	<b>\$3,502</b>	<b>\$5,365</b>	Disability insurance / Penal system
Uncompensated Hospital Care	\$367	\$536	
Other Public Subsidies for the Uninsured	\$668	\$668	
Physician Ambulatory Services	\$305	\$305	
Philanthropic Spending	\$18	\$37	
Uninsured Individuals' Costs	\$459	\$459	
Lost Health Status	\$1,645	\$3,280	
Added Risk	\$40	\$81	

<sup>1</sup> Calculated using 2001 CPS (data collected March 2002) -- corresponding to study time period.

<sup>2</sup> Calculated using average of 2001 and 2002 CPS (March 2002 and March 2003) -- corresponding to study time period.

As with previous studies, there are components that our study in Maryland does not include. Specifically, we are unable to estimate the costs of disability insurance provided to individuals who lack health insurance, or who have lacked health coverage in the past. Likewise, the costs to the criminal justice system of providing health care to uninsured individuals in prisons are not included. Additionally, while we initially set out to identify potential losses to employers through reduced productivity related to a lack of health insurance for employees, our review of

the literature did not reveal any evidence of such losses; we consequently dropped this category from our study.

In conclusion, we urge caution in interpreting the results of this study. Not all of the expenditures documented would be eliminated should insurance coverage be expanded. A substantial portion of expenditures would be realized by private payers and individuals – both insured and uninsured – through lower insurance premiums and enhanced health status. While spending on the uninsured within the existing health system could provide a base for insurance expansion (Meyer and Wicks 2003), a meaningful health insurance expansion would clearly require funding beyond what is documented in this study.

#### **4. Conclusion**

A lack of health insurance coverage carries serious financial consequences, both for individuals and for society as a whole. Although the uninsured themselves pay a significant portion of the health care bill when they seek services, a larger portion of the costs are passed on to the rest of society in one way or another. Some are absorbed by health care providers as charity care when they offer services without being fully compensated. Others are passed on in the form of higher bills to health care users who are insured, the so-called cost shifting phenomenon. Many costs are picked up by various state and county programs.

This study has provided detailed estimates of the magnitude of the costs of uninsurance. This information has important implications for policies to expand insurance coverage. Many of the costs of medical services that would be consumed by those newly-insured under an expansion are already paid for – either by the uninsured themselves or by others. Some costs now incurred by the uninsured would be avoided because they would receive more timely care. The evidence shows that if the uninsured were to have coverage, their net consumption of medical services would increase. Total health care spending would rise, but the net increase would be substantially less than the total cost of the medical services consumed by the newly-insured. Furthermore, some of the costs that would otherwise be paid by other payers are recoverable and could be used to finance the cost of the policy that expands coverage. For example, dollars now

spent by the public safety net system to cover the costs of services consumed by the uninsured could be diverted to pay for their insurance coverage.

Third-party payers in Maryland currently pay over \$1 billion per year for the health care for the uninsured. However, this does not mean that it is possible to “capture” savings of that amount to pay for a program to provide everyone with coverage. If all Maryland citizens had coverage, some current costs would be fully or partially recoverable – including government spending for public health programs, school health programs, and safety net providers. The net budgetary cost of expansion could be reduced by the amount of the captured savings. On the other hand, some of the savings would be retained by other payers. Physician incomes would likely rise, private insurance would contribute less to the hospital uncompensated pool, and philanthropic spending on the uninsured would decrease. Uninsured individuals themselves would continue to spend money for health services in the form of copayments, premiums, and deductibles. The financial benefits accruing to private and individual payers would not directly contribute to the costs of expanding health insurance coverage. However, the resulting reduction in the cost of health status losses would benefit individuals, and ultimately, society as a whole.

## Appendix 1 – Total Expenditures and Costs Related to Non-Insurance, by Source

Payer	Value FY 2002 (\$ millions)		% of Total (Low Estimate)
	Low Estimate	High Estimate	
<b>Federal Government</b>	<b>\$277.1</b>	<b>\$340.9</b>	<b>11.4%</b>
Uncompensated Care	\$139.1	\$202.8	5.7%
Statewide Programs	\$97.6	\$97.6	4.0%
Local Programs	\$33.5	\$33.5	1.4%
FQHCs	\$6.8	\$6.8	0.3%
School Programs	\$0.1	\$0.1	0.0%
<b>State Government</b>	<b>\$334.1</b>	<b>\$343.1</b>	<b>13.8%</b>
Uncompensated Care	\$19.7	\$28.8	0.8%
Statewide Programs	\$310.9	\$310.9	12.8%
School Programs	\$0.2	\$0.2	0.0%
FQHCs	\$3.2	\$3.2	0.1%
<b>Local Governments</b>	<b>\$9.5</b>	<b>\$9.5</b>	<b>0.4%</b>
Local Programs	\$9.4	\$9.4	0.4%
School Programs	\$0.1	\$0.1	0.0%
<b>Private Payers</b>	<b>\$318.0</b>	<b>\$374.8</b>	<b>13.1%</b>
Uncompensated Care	\$95.1	\$138.7	3.9%
Private Physicians	\$210.7	\$210.7	8.7%
Philanthropy	\$12.1	\$25.4	0.5%
<b>Individual Losses</b>	<b>\$1,483.2</b>	<b>\$2,641.8</b>	<b>61.2%</b>
Individuals (out of pocket)	\$317.7	\$317.7	13.1%
Health Status Losses	\$1,137.5	\$2,268.1	47.0%
Losses from Risk	\$28.0	\$56.0	1.2%
<b>Total</b>	<b>\$2,422</b>	<b>\$3,710</b>	<b>100%</b>

## Appendix 2 – Total Expenditures and Costs Related to Non-Insurance, by Component and Source (Low Estimate)

Component	Value FY 2002 (\$ millions) - by Source - Low Estimate					Total
	Federal Government	State Government	Local Governments	Private Payers	Individual Losses	
1. Hospital Care	\$139.1	\$19.7		\$95.1		\$254
2. Other Public Subsidies :						
Statewide programs	\$97.6	\$310.9				\$409
County-level	\$33.5		\$9.4			\$43
FQHCs	\$6.8	\$3.2				\$10
School-based health	\$0.1	\$0.2	\$0.1			\$0.5
3. Physician Services				\$210.7		\$211
4. Philanthropic Spending				\$12.1		\$12
5. Individuals' Out of Pocket					\$317.7	\$318
6. Health Status Losses					\$1,137.5	\$1,138
7. Losses from Risk					\$28.0	\$28
<b>Total</b>	<b>\$277</b>	<b>\$334</b>	<b>\$10</b>	<b>\$318</b>	<b>\$1,483</b>	<b>\$2,422</b>

### Appendix 3 – Expenditures and Costs Related to Non-Insurance, per Uninsured Person, by Component and Source (Low Estimate)

Component	Costs per Uninsured Person - by Source - Low Estimate					Total
	Federal Government	State Government	Local Governments	Private Payers	Individual Losses	
1. Hospital Care	\$201.1	\$28.5		\$137.5		\$367
2. Other Public Subsidies :						
Statewide programs	\$141.2	\$449.7				\$591
County-level	\$48.4		\$13.6			\$62
FQHCs	\$9.9	\$4.6				\$14
School-based health	\$0.2	\$0.3	\$0.2			\$1
3. Physician Services				\$304.8		\$305
4. Philanthropic Spending				\$17.6		\$18
5. Individuals' Out of Pocket					\$459.4	\$459
6. Health Status Losses					\$1,645.0	\$1,645
7. Losses from Risk					\$40.5	\$40
<b>Total</b>	<b>\$401</b>	<b>\$483</b>	<b>\$14</b>	<b>\$460</b>	<b>\$2,145</b>	<b>\$3,502</b>

## **Appendix 4 – Maryland’s All-Payer Rate System**

### **Background**

Maryland is the only state in the U.S. whose hospital rates are regulated by a state agency through an all-payer rate system. In 1971, in order to control rapidly rising hospital charges, the state enacted hospital rate regulation and created the Health Services Cost Review Commission (HSCRC) in order to set the rates that hospitals are allowed to charge. The Commission’s four-part mandate is to:

- Publicly disclose information on the cost and financial position of hospitals;
- Review and approve hospital rates;
- Collect information detailing transactions between hospitals and firms with which their trustees have a financial interest; and
- Maintain the solvency of efficient and effective hospitals.

Based upon a permanent waiver granted by the federal government in 1980, Maryland is exempt from national Medicare and Medicaid reimbursement requirements, on the condition that federal payments per case for Medicare in Maryland have not risen more rapidly than rest of the country’s over time – known as the “waiver test”. Using a uniform data reporting system, hospitals must submit detailed financial statements and discharge records annually to HSCRC, which reviews the reasonableness of expenditures. All hospital financial and discharge records are publicly available through HSCRC.

From 1977 to the mid-1990s, Maryland’s cost increases were below the national average, but this performance began to erode in the mid-1990s. The system underwent a redesign in spring 2000 in order to improve stability and predictability of the rates for hospitals and payers; recognize input cost inflation; and be reflective of the national experience.

### **How the All-Payer System Works**

All payers reimbursing hospital services in Maryland, including Medicare, Medicaid, and commercial insurers, must pay the same rates to a particular hospital. A unique rate is established for services at each hospital – for example, an inpatient day or an operating room minute – based on a target charge per case that is set based upon several factors, including:

- Standards of reasonable fixed and variable operating costs;
- Case mix index;
- Labor market;
- Direct medical education (DME) costs;
- Indirect medical education;
- DSH payments;
- Capital needs;
- Amount of uncompensated care provided.

Hospitals' rates are updated on an annual basis based on a complex formula; at any time, a hospital may request a full rate review if administrators feel their rates do not reflect their costs. All payers in Maryland are required to pay hospitals the rates set by HSCRC, although a few specific discounts apply. For example, third-party payers willing to provide working capital according to a specified formula or payment upon discharge (a "prompt pay" discount) receive a 2 percent discount. In addition, commercial insurers who provide affordable coverage in order to cover previously uninsured residents get a 4 percent discount for "substantial affordable coverage" (SAC). Medicaid and Medicare receive a 4 percent discount.

### **Factoring Uncompensated Care into the Rates**

In order to determine the amount of uncompensated care – the sum of charity care and bad debts as a percent of gross patient revenues – that is factored into each hospital's reimbursement rates, HSCRC staff run a regression for each hospital, using two predictor variables: (1) percent of patient days from non-Medicare admissions through the ER; and (2) percent of patient days from self-pay, charity care, and Medicaid patient days in order to produce a fitted value for the "estimated" amount of uncompensated care percent. For each hospital, one of three values for uncompensated care is used as an input for the rate formula:

- The adjusted fitted (from the regression);
- The actual amount;
- The amount used in the previous year.

The value that is chosen depends on various factors; HSCRC may choose the value, for example, that may be lower than the actual uncompensated care percentage in order to encourage hospitals

to improve collections and not simply write off bad debts. Whichever value is chosen is then used as the uncompensated care percentage that factors into the rate-setting equation. The maximum allowable value for uncompensated care that is used to determine each hospital's rates is 8.4 percent. Hospitals whose uncompensated care provision exceeds 8.4 percent of revenues receive additional money from an uncompensated care fund (see below).

### **The Uncompensated Care Fund**

Each hospital pays  $\frac{3}{4}$  of one percent of gross revenues annually into an "uncompensated care fund" administered by HSCRC. The fund is used to compensate hospitals with greater than 8.4 percent in uncompensated care, the largest allowable percentage used in setting the all-payer rates. Only 11 hospitals in MD (of 50) had rates greater than 8.4 percent in FY 2002.

### **Implications for Provision of Uncompensated Care**

A major implication of the all-payer rate system is that there are no explicit "charity hospitals" in Maryland – treating uninsured patients is a responsibility of all hospitals. In addition, patient dumping and cost shifting are avoided to large extents. Theoretically, because uncompensated care is reimbursed through the rate structure, this provides incentives for hospitals to treat uninsured patients and also collect all they can before writing off bad debts.

Additional information on Maryland' all-payer hospital system may be found in the following documents and publications:

- Maryland Hospital Association. January 2002. *Achievement, Access & Accountability: A Guide to Hospital Rate Regulation in Maryland.*
- Maryland Health Services Cost Review Commission. June 2002. *2002 Uncompensated Care Policy and Regression.*
- Maryland Health Services Cost Review Commission. April 2001. *Report to the Governor, Fiscal Year 2001.*

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